INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

August 22, 2003

TO: Interested Parties / Applicant

RE: Huntington Powder Coating, Inc. / 069-17707-00063

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Registration

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FN-REGIS.dot 8/11/03

August 22, 2003

Brent Kirkham
Huntington Powder Coating, Inc.
Box 590
Huntington, Indiana 46750

Re: Registered Construction and Operation Status,
069-17707-00063

Dear Mr. Kirkham:

The application from Huntington Powder Coating, Inc., received on May 9, 2003, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following powder coating application source, to be located at 1675 Riverfork Drive East, Huntington, Indiana 46750, Indiana, is classified as registered:

(a) One (1) automatic powder spray booth, known as SB #4, installed in 2000, equipped with dry filters for particulate overspray control, capacity: 41.25 pounds of powder per hour.

(b) One (1) manual powder spray booth, known as SB #3, installed in 2000, equipped with dry filters for particulate overspray control, capacity: 3.0 pounds of powder per hour.

(c) One (1) single chamber incinerator, known as burn off oven, installed in 2000, exhausted to Stack #7, with two (2) burners rated at 0.8 million British thermal units per hour, each, capacity: 0.1171 pounds per hour.

(d) One (1) bake oven, installed in 2000, consisting of two (2) burners known as Bake #1, rated at 0.8 million British thermal units per hour and Bake #2, rated at 1.6 million British thermal units per hour.

(e) One (1) washer, known as Washer, installed in 2000, exhausted to Stack #1, rated at 2.5 million British thermal units per hour.

(f) One (1) dry off oven, known as Dry Off Oven, installed in 2000, exhausted to Stack #2, rated at 0.8 million British thermal units per hour.

(g) One (1) powder spray booth for oversized parts, equipped with a blanket at the back for capturing overspray, and with an exhaust fan venting into the building, with maximum annual capacity of 500 pounds of powder.

(h) One (1) natural gas-fired oven, with a maximum heat input capacity of 2.5 mmBtu/hr.

The following conditions shall be applicable:

(i) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute

averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuos opacity monitor in a six (6) hour period.

(ii) Any change or modification which may increase the potential to emit a combination of HAPs, VOC, SO2, NO_X CO, PM or PM_{10} to twenty five (25) tons per year or a single HAP to ten (10) tons per year from this source shall require approval from IDEM, OAQ prior to making the change.

(iii) Pursuant to 326 IAC 4-2 (Incinerators):

(a) The one (1) single chamber incinerator, known as burn off oven, which emits regulated pollutants shall:

(1) Consist of primary and secondary chambers or the equivalent.

(2) Be equipped with a primary burner unless burning wood products.

(3) Comply with 326 IAC 5-1 and 326 IAC 2.

(4) Be maintained, operated, and burn waste in accordance with the manufacturer's specifications or an operation and maintenance plan as specified in subsection (c).

(5) Not emit particulate matter in excess of one (1) of the following:

(A) Three-tenths (0.3) pound of particulate matter per one-thousand (1,000) pounds of ry exhaust gas under standard conditions corrected to fifty percent (50%) excess air for incinerators with a maximum solid waste capacity of greater than or equal to two hundred (200) pounds per hour.

(B) Five-tenths (0.5) pound of particulate matter per one-thousand (1,000) pounds of dry exhaust gas under standard conditions corrected to fifty percent (50%) excess air for incinerators with solid waste capacity less than two hundred (200) pounds per hour.

(6) If any of the requirements of subdivisions (1) through (5) are not met, then the owner or operator shall stop charging the incinerator until adjustments are made that address the underlying cause of the deviation.

(b) An incinerator is exempt from subsection (a)(5) if subject to a more stringent particulate matter emission limit in 40 CFR 52 Subpart P, State Implementation Plan for Indiana.

(c) An owner or operator developing an operation and maintenance plan pursuant to subsection (a)(4) must comply with the following:

(1) The operation and maintenance plan must be designed to meet the particulate matter emission limitation specified in subsection (a)(5) and include the following:
(A) Procedures for receiving, handling, and charging waste.
(B) Procedures for incinerator startup and shutdown.
(C) Procedures for responding to a malfunction.

(D) Procedures for maintaining proper combustion air supply levels.
(E) Procedures for operating the incinerator and associated air pollution control systems.
(F) Procedures for handling ash.
(G) A list of the wastes hat can be burned in the incinerator.

(2) Each incinerator operator shall review the plan before initial implementation of the operation and maintenance plan and annually thereafter.

(3) The operation and maintenance plan must be readily accessible to the incinerator operators.

(4) The owner or operator of the incinerator shall notify the department, in writing, thirty (30 days after the operation and maintenance plan is initially developed pursuant to this section.

(d) The owner or operator of the incinerator must make the manufacturer's specifications or the operation and maintenance plan available to the department upon request.

(iv) Pursuant to 326 IAC 6-3-2 (Process Operations) the particulate matter (PM) from SB #3 and SB #4 shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The dry filters shall be in operation at all times the SB #3 and SB #4 is in operation, in order to comply with this limit.

This registration is the first air approval issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3)). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original signed by

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

mm

cc: File - Huntington County
Huntington County Health Department

Air Compliance - Ryan Hillman
Permit Tracking
Air Programs Section- Michele Boner

Registration

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3)

Company Name:	**Huntington Powder Coating, Inc.**
Address:	**1675 Riverfork Drive East**
City:	**Huntington, Indiana 46750**
Authorized individual:	
Phone #:	
Registration #: 069-17707-00063	

I hereby certify that Huntington Powder Coating, Inc. is still in operation and is in compliance with the requirements of Registration **069-17707-00063**.

Name (typed):
Title:
Signature:
Date:

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Re-Registration

Source Background and Description

Source Name:	**Huntington Powder Coating, Inc.**
Source Location:	**1675 Riverfork Drive East, Huntington, Indiana 46750**
County:	**Huntington**
SIC Code:	**3479**
Registration No.:	**069-17707-00063**
Permit Reviewer:	**Madhurima D. Moulik**

The Office of Air Quality (OAQ) has reviewed an application from Huntington Powder Coating, Inc. relating to the operation of a powder coating application source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) One (1) automatic powder spray booth, known as SB #4, installed in 2000, equipped with dry filters for particulate overspray control, capacity: 41.25 pounds of powder per hour.

(b) One (1) manual powder spray booth, known as SB #3, installed in 2000, equipped with dry filters for particulate overspray control, capacity: 3.0 pounds of powder per hour.

(c) One (1) single chamber incinerator, known as burn off oven, installed in 2000, exhausted to Stack #7, with two (2) burners rated at 0.8 million British thermal units per hour, each, capacity: 0.1171 pounds per hour.

(d) One (1) bake oven, installed in 2000, consisting of two (2) burners known as Bake #1, rated at 0.8 million British thermal units per hour and Bake #2, rated at 1.6 million British thermal units per hour.

(e) One (1) washer, known as Washer, installed in 2000, exhausted to Stack #1, rated at 2.5 million British thermal units per hour.

(f) One (1) dry off oven, known as Dry Off Oven, installed in 2000, exhausted to Stack #2, rated at 0.8 million British thermal units per hour.

New Emission Units and Pollution Control Equipment

The source also consists of the following new facilities/units:

(a) One (1) powder spray booth for oversized parts, equipped with a blanket at the back for capturing overspray, and with an exhaust fan venting into the building, with maximum annual capacity of 500 pounds of powder.

(b) One (1) natural gas-fired oven, with a maximum heat input capacity of 2.5 mmBtu/hr.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) Registration No. 069-14209-00063, issued on July 3, 2001.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
#1	Washer	13.6	2.24	na	exhausts to bake oven
#2	Dry Off Oven	13.6	1.4	767	90
#5	wicks heat from front of paint oven	13.6	1.5	2,031	220
#6	Bake Oven	13.6	1.25	775	365
#7	Burn Off Oven	26.0	1.17	588	450

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 9, 2003, with additional information received on July 14, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations for combustion units, incinerator, and powder spray booths SB #3 and SB #4.

Emissions from new powder coating unit:

Usage Rate = 500 lb per year

Wt. % solids = 100%

Transfer Efficiency = 75%

PM emissions = 0.25 x 500 lb/yr x 1 ton/2000 lb = 0.1 tons per year

Potential To Emit of Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	7.1
PM-10	7.3
SO_2	Negligible
VOC	0.2
CO	3.6
NO_x	4.3

HAP's	Potential To Emit (tons/year)
Single HAP	<10
TOTAL	***< 25***

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5.5. A registration will be issued.

County Attainment Status

The source is located in Huntington County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Huntington County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 . See the State Rule Applicability for the source section.

(b) Huntington County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,
(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAQ inspector assigned to the source.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source. The single chamber incinerator, known as burn off oven, is not subject to NSPS Subpart E (40 CFR Part 60.50) and 326 IAC 12, because the powder coating being combusted does not meet the definition of solid waste as defined by 40 CFR Part 60.51 (b).

(b) The single chamber incinerator, known as burn off oven is not subject to the requirements of National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 20 and 40 CFR Part 63) Subpart EEE because the burn off oven is an industrial furnace which is exempt for this rule.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Huntington County and the potential to emit of all pollutants is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9

or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of this powder coating facility will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

State Rule Applicability - Individual Facilities

326 IAC 4-2 (Incinerators)

(a) The one (1) single chamber incinerator, known as burn off oven, which emits regulated pollutants shall:

(1) Consist of primary and secondary chambers or the equivalent.

(2) Be equipped with a primary burner unless burning wood products.

(3) Comply with 326 IAC 5-1 and 326 IAC 2.

(4) Be maintained, operated, and burn waste in accordance with the manufacturer's specifications or an operation and maintenance plan as specified in subsection (c).

(5) Not emit particulate matter in excess of one (1) of the following:

(A) Three-tenths (0.3) pound of particulate matter per one-thousand (1,000) pounds of ry exhaust gas under standard conditions corrected to fifty percent (50%) excess air for incinerators with a maximum solid waste capacity of greater than or equal to two hundred (200) pounds per hour.

(B) Five-tenths (0.5) pound of particulate matter per one-thousand (1,000) pounds of dry exhaust gas under standard conditions corrected to fifty percent (50%) excess air for incinerators with solid waste capacity less than two hundred (200) pounds per hour.

(6) If any of the requirements of subdivisions (1) through (5) are not met, then the owner or operator shall stop charging the incinerator until adjustments are made that address the underlying cause of the deviation.

(b) An incinerator is exempt from subsection (a)(5) if subject to a more stringent particulate matter emission limit in 40 CFR 52 Subpart P, State Implementation Plan for Indiana.

(c) An owner or operator developing an operation and maintenance plan pursuant to subsection (a)(4) must comply with the following:

(1) The operation and maintenance plan must be designed to meet the particulate matter emission limitation specified in subsection (a)(5) and include the following:
(A) Procedures for receiving, handling, and charging waste.
(B) Procedures for incinerator startup and shutdown.
(C) Procedures for responding to a malfunction.
(D) Procedures for maintaining proper combustion air supply levels.
(E) Procedures for operating the incinerator and associated air pollution control systems.
(F) Procedures for handling ash.
(G) A list of the wastes hat can be burned in the incinerator.

(2) Each incinerator operator shall review the plan before initial implementation of the operation and maintenance plan and annually thereafter.

(3) The operation and maintenance plan must be readily accessible to the incinerator operators.

(4) The owner or operator of the incinerator shall notify the department, in writing, thirty (30

days after the operation and maintenance plan is initially developed pursuant to this section.

(d) The owner or operator of the incinerator must make the manufacturer's specifications or the operation and maintenance plan available to the department upon request.

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from SB #3 and SB#4 shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The dry filters shall be in operation at all times the SB #3 and SB#4 is in operation, in order to comply with this limit.

The potential to emit of PM from the new powder coating booth is less than 0.551 lb/hr. Therefore, 326 IAC 6-3-2 does not apply.

326 IAC 8-2 (Surface Coating Emissions Limitations)

There are no VOC emissions from the powder coating operations at this source. Therefore, 326 IAC 8-2 does not apply.

Conclusion

The construction of the new powder coating operation and the operation of this powder coating operation shall be subject to the conditions of the Registration No. 069-17707-00063.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
Company Name: Huntington Powder Coating, Inc.
Address City IN Zip: 1675 Riverfork Drive East, Huntington, Indiana
CP: 069-17707
Plt ID: 069-00063
Reviewer: Madhurima D. Moulik
Date: July 17, 2003

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
9.8	85.8

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.1	0.3	0.0	4.3	0.2	3.6

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 7/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions
Company Name: Huntington Powder Coating, Inc.
Address City IN Zip: 1675 Riverfork Drive East, Huntington, Indiana
CP: 069-17707
Plt ID: 069-00063
Reviewer: Madhurima D. Moulik
Date: June 2, 2003

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	9.014E-05	5.151E-05	3.219E-03	7.726E-02	1.459E-04

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	2.146E-05	4.722E-05	6.009E-05	1.631E-05	9.014E-05

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations
Incinerator

Company Name: Huntington Powder Coating, Inc.
Address City IN Zip: 1675 Riverfork Drive East, Huntington, Indiana
CP: 069-17707
Plt ID: 069-00063
Reviewer: Madhurima D. Moulik
Date: July 17, 2003

THROUGHPUT lbs/hr	THROUGHPUT ton/yr
0.1171	0.512898

	POLLUTANT				
	PM	SO2	CO	VOC	NOX
Emission Factor in lb/ton	7.0	2.5	10.0	3.0	3.0
Potential Emissions in ton/yr	0.002	0.001	0.003	0.001	0.001

Methodology

Emission factors are from AP 42 (5th Edition 1/95) Table 2.1-12, Uncontrolled emission factors for industrial/commercial refuse combustors, multiple chambers

incinera.wb3

Throughput (lb/hr) * 8760 hr/yr * ton/2000 lb = throughput (ton/yr)

no update necessary 11/98

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: Huntington Powder Coating, Inc.
Address City IN Zip: 1675 Riverfork Drive East, Huntington, Indiana
CP: 069-17707
Plt ID: 069-00063
Reviewer: Madhurima D. Moulik
Date: July 17, 2003

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
SB # 4 Powder Spray																
Ansi 61 Grey Polyester Powde	13.3	0.00%	0.0%	0.0%	0.0%	100.00%	3.11000	1.000	0.00	0.00	0.00	0.00	0.00	3.61	0.00	98%
SB #3 Manual Powder Spray																
Ansi 61 Grey Polyester Powde	13.3	0.00%	0.0%	0.0%	0.0%	100.00%	0.22600	1.000	0.00	0.00	0.00	0.00	0.00	3.28	0.00	75%

State Potential Emissions **Add worst case coating to all solvents** **Potential to Emit =** **0.00** **0.00** **0.00** **6.89**

METHODOLOGY

SB#4 is totally enclosed manual powder spray booth which collects the powder coating using dry filters and then recycles and reuses the powder collected within SB#4
Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used